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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,124

12/27/2005

Stanley R Terlecky

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EXAMINER

MEAH, MOHAMMAD Y

ART UNIT

PAPER NUMBER

1652

MAIL DATE

DELIVERY MODE

03/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,124	Applicant(s) TERLECKY ET AL.	
	Examiner MD. YOUNUS MEAH	Art Unit 1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26,29,34-36,41,42,45-53,56 and 57 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-26,29,34-36,41,42,45-53,56 and 57 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

The claims 1-26, 29, 34-36, 41-42, 45-53 and 56-57 are pending in the instant office action.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-12, 20, 21, 35, drawn to a modified catalase having a carboxy-terminal PTS1 sequence (i.e., S/A/C-K/R/H-L/M), compositions thereof and use thereof for reducing the concentration of hydrogen peroxide in a cell.

Group II, claim(s) 13, 14, drawn to a modified catalase having a PTS2 sequence (i.e., K/R -L/I/V-X₅-H/Q-A/L/F) at or near the amino terminus, compositions thereof and use thereof for reducing the concentration of hydrogen peroxide in a cell.

Group III, claim(s) 15, 16, 22, drawn to a modified catalase having a PTS2 sequence (i.e., K/R -L/I/V-X₅-H/Q-A/L/F) at or near the amino terminus and a carboxy-terminal PTS1 sequence (i.e., S/A/C-K/R/H-L/M), compositions thereof and use thereof for reducing the concentration of hydrogen peroxide in a cell.

Group IV, claim(s) 17-19, 56, drawn to nucleic acids or host cells encoding a modified catalase having a carboxy-terminal PTS1 sequence (i.e., S/A/C-K/R/H-L/M), and use thereof for producing the modified catalase.

Group V, claim(s) 57, drawn to nucleic acids or host cells encoding a modified catalase having a PTS2 sequence (i.e., K/R -L/I/V-X₅-H/Q-A/L/F) at or near the amino terminus and a carboxy-terminal PTS1 sequence (i.e., S/A/C-K/R/H-L/M), and use thereof for producing the modified catalase.

Group VI, claim(s) 23, 24, 26, 29, 34, 36, and 41-42, drawn to a peroxisomally-targeted polypeptide comprising a modified catalase having a carboxy-terminal PTS1 sequence (i.e., S/A/C-K/R/H-L/M) and a delivery or translocation molecule or moiety bound thereto and use thereof for reducing the concentration of hydrogen peroxide in a cell.

Group VII, claim(s) 25, drawn to a peroxisomally-targeted polypeptide comprising a modified catalase having a having a PTS2 sequence (i.e., K/R -L/I/V-X₅-H/Q-A/L/F) at or near the amino terminus and a carboxy-terminal PTS1 sequence (i.e., S/A/C-K/R/H-L/M) and a delivery or translocation molecule or moiety bound thereto and use thereof for reducing the concentration of hydrogen peroxide in a cell.

Art Unit: 1652

Group VIII, claim(s) 45-47, 49, 50, and 52-53, drawn to methods of treating a disease associated with inadequate levels of peroxisomal catalase using a modified catalase having a carboxy-terminal PTS1 sequence (i.e., S/A/C-K/R/H-L/M).

Group IX, claim(s) 48, drawn to methods of treating a disease associated with inadequate levels of peroxisomal catalase using a modified catalase having a PTS2 sequence (i.e., K/R -L/I/V-X₅-H/Q-A/L/F) at or near the amino terminus and a carboxy-terminal PTS1 sequence (i.e., S/A/C-K/R/H-L/M).

Group X, claim(s) 51, drawn to methods of treating or preventing skin wrinkling using a modified catalase having a carboxy-terminal PTS1 sequence (i.e., S/A/C-K/R/H-L/M).

The inventions listed as Groups I-X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the only shared technical feature of Groups I-X is that each relate to a modified catalase comprising one or more non-natural peroxisome targeting sequences. However, this shared technical feature is not a special technical feature as defined by PCT Rule 13.2 as it does not constitute a contribution over the art. Sheik et al. (PNAS 95 : 2961, 1998) teach modified catalases comprising a carboxy terminal PTS1 sequence (i.e., SKL) or a PTS2 sequence (i.e., HRLQVVLGHL) immediately following the initial methionine. As such

neither the modified catalase fusions nor the PTS1 or PTS2 peptides themselves are special technical features. Furthermore, Groups VIII-IX or X do not have unity with Groups I-III as Groups I-III already include a method of use of the modified catalase which comprises unrelated steps to the methods of Groups VIII-IX or X and 37 CFR 1.475 does not provide for the inclusion of multiple methods of use within the main invention.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement is traversed (37 CFR 1.143). Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Meah whose telephone number is 571-272-1261. The examiner can normally be reached on 8:30-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 571-272-0928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Mohammad Meah/

Acting Examiner of Art Unit 1652/1600

Mohammad Younus Meah, PhD

Examiner, Art Unit 1652

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Application/Control Number: 10/533,124
Art Unit: 1652

Page 7